

Amendments to the Specification:

On page 1, prior to the first paragraph which begins on line 2, please insert the following:

FIELD OF THE INVENTION

Please replace the paragraph which begins on page 1, line 2 and which ends on line 4, with the following rewritten paragraph:

The present invention ~~concerns~~ relates to potentiometric sensors, particularly a pH-sensor or a redox-sensor, respectively a pH-electrode or a redox-electrode, for connection to a transmitter.

On page 1, prior to the second paragraph which begins on line 5, please insert the following:

BACKGROUND OF THE INVENTION

Please replace the paragraph which begins on page 1, line 13 and which ends on line 17, with the following rewritten paragraph:

The ~~goal of the~~ present invention ~~and its solution~~ will ~~now~~ be explained on the basis of examples of pH-electrodes, respectively pH-sensors. However, the embodiments logically apply to other potentiometric sensors as well, particularly redox-sensors, respectively redox-electrodes.

On page 3, prior to the paragraph which begins on line 2, please insert the following:

SUMMARY OF THE INVENTION

Please replace the paragraph which begins on page 3, line 5 and ends on line 12, with the following rewritten paragraph:

This object is achieved by the pH-sensor ~~of the independent claim 1. The pH-sensor of the invention includes~~ including: an elementary sensor for registering a pH-value; a digital data memory permanently connected with the elementary sensor for storing sensor data or process data; and an interface for connection to a superordinated unit for transferring a signal representing the pH-value, and for reading and/or writing digital data from, respectively to, the digital data memory.

Please replace the paragraph which begins on page 3, line 27 and which ends on page 4, line 7, with the following rewritten paragraph:

In a presently preferred embodiment, the interface of the pH-sensor is a contactless interface, as is described in the ~~yet unpublished~~ European Patent Application No. 1 216 079 of the same assignee, now U.S. Patent No. 6,705,898. The term "contactless" denotes that the interface on the sensor side is electrically, respectively galvanically, isolated from the interface on the transmitter side. The contactless interface can be, for example, an optical, capacitive, or inductive interface, with an inductive interface being presently preferred. For details concerning the structure of the interface, see the European Patent Application No. 1 216 079, which is here fully incorporated by reference.

On page 6, prior to the paragraph which begins on line 15, please insert the following:

BRIEF DESCRIPTION OF THE DRAWINGS

On page 6, prior to the paragraph which begins on line 22, please insert the following:

DESCRIPTION OF THE PREFERRED EMBODIMENTS

U.S. National Phase of PCT/EP2003/005108

Please replace the paragraph which appears on page 7, line 27 and 28, with the following rewritten paragraph:

For details of the inductive data transfer and power supply, see again ~~the European Patent Application No. 1 216 079~~ U.S. Patent No. 6,705,898.